

## ABSTRACT

The invention relates to novel analysis slides or substrates with a closed configuration. The slides may be used for any application which normally utilizes a conventional microscope slide and can be used in conjunction with any type of equipment typically used to manipulate or evaluate a standard microscope slide. In particular, the invention provides closed slides for covalent immobilization of polypeptides and nucleic acids. Further provided are methods for carrying out biological assays using arrays of biomolecules immobilized on the slides of the invention. The arrays of the invention are comprised of a unique meandering or straight channel design as compared to the rectangular design of conventional arrays.